

USSN 10/629,649
Atty Docket No. 0212-CIP-9

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently amended) A method of treating a subject suffering from polycystic ovary syndrome (PCOS) PCOS, said method comprising administering to a subject suffering from PCOS an amount effective to treat at least one symptom of PCOS of a peptide compound capable of binding to and activating a GLP-1 receptor *in vivo*.

2. (Original) The method according to claim 1, wherein the symptom is selected from the group consisting of insulin resistance, hyperinsulinemia, type-2 diabetes, obesity, hypertension, hyperlipidemia, anovulation or irregular ovulation, infertility, hyperandrogenism, hirsutism, alopecia, acne, enlarged multifollicular ovaries, abnormal uterine bleeding, and spontaneous abortion.

3. (Original) The method according to claim 1, wherein the subject is a human.

4. (Previously presented) The method according to claim 1, wherein said peptide compound comprises a GLP-1 peptide or an exendin peptide.

5. (Previously presented) The method according to claim 1, wherein the peptide compound is administered by an infusion pump or by subcutaneous injection of a slow release formulation.

6. (Previously presented) The method according to claim 1 wherein the peptide compound is administered with an agent selected from the group consisting of an ovulation inducing drug, an anti-androgenic drug, an insulin-sensitizing agent and glucose.

Claims 7-11. (Canceled)

USSN 10/629,649
Atty Docket No. 0212-CIP-9

12. (Currently amended) A method of reducing insulin resistance in a subject suffering from PCOS, said method comprising administering to a subject suffering from PCOS an amount effective to reduce insulin resistance, ~~treat at least one symptom of PCOS~~ of a peptide compound capable of binding to and activating a GLP-1 receptor *in vivo*, wherein said insulin resistance is a symptom of PCOS, to thereby reduce insulin resistance in said subject.

13. (Original) The method according to claim 12, wherein the subject is a human.

14. (Previously presented) The method according to claim 12, wherein said peptide compound comprises a GLP-1 peptide or exendin peptide.

15. (Previously presented) The method according to claim 12, wherein the peptide compound is administered by an infusion pump or by subcutaneous injection of a slow release formulation.

16. (Previously presented) The method according to claim 12 wherein the peptide compound is administered with an agent selected from the group consisting of an ovulation inducing drug, an anti-androgenic drug, an insulin-sensitizing agent and glucose.

Claims 17-21. (Canceled)

22. (Currently amended) A method of preventing the onset of type-2 diabetes in a subject suffering from PCOS, said method comprising administering to a subject suffering from PCOS an amount effective to prevent the onset of type-2 diabetes, ~~treat at least one symptom of PCOS~~ of a peptide compound capable of binding to and activating a GLP-1 receptor *in vivo*, wherein said onset of diabetes is a symptom of PCOS, to thereby prevent the onset of type-2 diabetes in said subject.

23. (Original) The method according to claim 22, wherein the subject is a human.

USSN 10/629,649
Atty Docket No. 0212-CIP-9

24. (Previously presented) The method according to claim 22, wherein said peptide compound comprises a GLP-1 peptide or an exendin peptide.

25. (Previously presented) The method according to claim 22, wherein the peptide compound is administered by an infusion pump or by subcutaneous injection of a slow release formulation.

26. (Previously presented) The method according to claim 22 wherein the peptide compound is administered with an agent selected from the group consisting of an ovulation inducing drug, an anti-androgenic drug, an insulin-sensitizing agent and glucose.

Claims 27-31. (Canceled)

32. (Currently amended) A method of restoring regular menses in a subject suffering from PCOS, said method comprising administering to a subject suffering from PCOS an amount effective to restore regular menses, ~~treat at least one symptom of PCOS~~ of a peptide compound capable of binding to and activating a GLP-1 receptor *in vivo*, wherein irregular menses is a symptom of PCOS, to thereby restore regular menses in said subject.

33. (Original) The method according to claim 32, wherein the subject is a human.

34. (Previously presented) The method according to claim 32, wherein said peptide compound comprises a GLP-1 peptide or an exendin peptide.

35. (Previously presented) The method according to claim 32, wherein the peptide compound is administered by an infusion pump or by subcutaneous injection of a slow release formulation.

USSN 10/629,649
Atty Docket No. 0212-CIP-9

36. (Previously presented) The method according to claim 32 wherein the peptide compound is administered with an agent selected from the group consisting of an ovulation inducing drug, an anti-androgenic drug, an insulin-sensitizing agent and glucose.

Claims 37-41. (Canceled)

42. (Currently amended) A method of restoring regular ovulation in a subject suffering from PCOS, said method comprising administering to a subject suffering from PCOS an amount effective to restore regular ovulation, ~~treat at least one symptom of PCOS~~ of a peptide compound capable of binding to and activating a GLP-1 receptor *in vivo*, wherein irregular ovulation is a symptom of PCOS, to thereby restore regular ovulation in said subject.

43. (Original) The method according to claim 42, wherein the subject is a human.

44. (Previously presented) The method according to claim 42, wherein said peptide compound comprises a GLP-1 peptide or an exendin peptide.

45. (Previously presented) The method according to claim 42, wherein the peptide compound is administered by an infusion pump or by subcutaneous injection of a slow release formulation.

46. (Previously presented) The method according to claim 42 wherein the peptide compound is administered with an agent selected from the group consisting of an ovulation inducing drug, an anti-androgenic drug, an insulin-sensitizing agent and glucose.

Claims 47-51. (Cancelled)

52. (Currently amended) A method of restoring fertility in a subject suffering from PCOS, said method comprising administering to a subject suffering from PCOS an amount effective to ~~treat at least one symptom of PCOS~~ restore fertility, of a peptide compound capable

USSN 10/629,649
Atty Docket No. 0212-CIP-9

of binding to and activating a GLP-1 receptor *in vivo*, wherein reduced or absent fertility is a symptom of PCOS, to thereby restore fertility in said subject.

53. (Original) The method according to claim 52, wherein the subject is a human.

54. (Previously presented) The method according to claim 52, wherein said peptide compound comprises a GLP-1 peptide or an exendin peptide.

55. (Previously presented) The method according to claim 52, wherein the peptide compound is administered by an infusion pump or by subcutaneous injection of a slow release formulation.

56. (Previously presented) The method according to claim 52 wherein the peptide compound is administered with an agent selected from the group consisting of an ovulation inducing drug, an anti-androgenic drug, an insulin-sensitizing agent and glucose.

Claims 57-61. (Cancelled)

62. (Currently amended) A method for preventing spontaneous abortion in a subject suffering from PCOS, said method comprising administering to a subject suffering from PCOS an amount effective to ~~treat at least one symptom of PCOS~~ prevent spontaneous abortion, of a peptide compound capable of binding to and activating a GLP-1 receptor *in vivo*, wherein said spontaneous abortion is a symptom of PCOS, to thereby prevent spontaneous abortion in said subject.

63. (Original) The method according to claim 62, wherein the subject is a human.

64. (Previously presented) The method according to claim 62, wherein said peptide compound comprises a GLP-1 peptide or an exendin peptide.

USSN 10/629,649
Atty Docket No. 0212-CIP-9

65. (Previously presented) The method according to claim 62, wherein the peptide compound is administered by an infusion pump or by subcutaneous injection of a slow release formulation.

66. (Previously presented) The method according to claim 62 wherein the peptide compound is administered with an agent selected from the group consisting of an ovulation inducing drug, an anti-androgenic drug, an insulin-sensitizing agent and glucose.

Claims 67-71. (Cancelled)

72. (Previously presented) The method of claim 1, wherein said peptide compound comprises a GLP-1 peptide.

73. (Previously presented) The method of claim 1, wherein said peptide compound comprises exendin-3 or exendin-4.

74. (Previously presented) The method of claim 73, wherein said peptide compound comprises exendin-4 acid.

75. (Previously presented) The method of claim 73, wherein said peptide compound comprises exendin-4 amide.

76. (Previously presented) The method of claim 1, wherein said peptide compound comprises an exendin analog.

77. (Canceled)

78. (Previously presented) The method of claim 12, wherein said peptide compound comprises a GLP-1 peptide.

USSN 10/629,649
Atty Docket No. 0212-CIP-9

79. (Previously presented) The method of claim 12, wherein said peptide compound comprises exendin-3 or exendin-4.

80. (Previously presented) The method of claim 79, wherein said peptide compound comprises exendin-4 acid.

81. (Previously presented) The method of claim 79, wherein said peptide compound comprises exendin-4 amide.

82. (Previously presented) The method of claim 12, wherein said peptide compound comprises an exendin analog.

83. (Canceled)

84. (Previously presented) The method of claim 22, wherein said peptide compound comprises a GLP-1 peptide.

85. (Previously presented) The method of claim 22, wherein said peptide compound comprises exendin-3 or exendin-4.

86. (Previously presented) The method of claim 85, wherein said peptide compound comprises exendin-4 acid.

87. (Previously presented) The method of claim 85, wherein said peptide compound comprises exendin-4 amide.

88. (Previously presented) The method of claim 22, wherein said peptide compound comprises an exendin analog.

89. (Canceled)

USSN 10/629,649
Atty Docket No. 0212-CIP-9

90. (Previously presented) The method of claim 32, wherein said peptide compound comprises a GLP-1 peptide.

91. (Previously presented) The method of claim 32, wherein said peptide compound comprises exendin-3 or exendin-4.

92. (Previously presented) The method of claim 91, wherein said peptide compound comprises exendin-4 acid.

93. (Previously presented) The method of claim 91, wherein said peptide compound comprises exendin-4 amide.

94. (Previously presented) The method of claim 32, wherein said peptide compound comprises an exendin analog.

95. (Canceled)

96. (Previously presented) The method of claim 42, wherein said peptide compound comprises a GLP-1 peptide.

97. (Previously presented) The method of claim 42, wherein said peptide compound comprises exendin-3 or exendin-4.

98. (Previously presented) The method of claim 97, wherein said peptide compound comprises exendin-4 acid.

99. (Previously presented) The method of claim 97, wherein said peptide compound comprises exendin-4 amide.

USSN 10/629,649
Atty Docket No. 0212-CIP-9

100. (Previously presented) The method of claim 42, wherein said peptide compound comprises an exendin analog.

101. (Canceled)

102. (Previously presented) The method of claim 52, wherein said peptide compound comprises a GLP-1 peptide.

103. (Previously presented) The method of claim 52, wherein said peptide compound comprises exendin-3 or exendin-4.

104. (Previously presented) The method of claim 103, wherein said peptide compound comprises exendin-4 acid.

105. (Previously presented) The method of claim 103, wherein said peptide compound comprises exendin-4 amide.

106. (Previously presented) The method of claim 52, wherein said peptide compound comprises an exendin analog.

107. (Canceled)

108. (Previously presented) The method of claim 62, wherein said peptide compound comprises a GLP-1 peptide.

109. (Previously presented) The method of claim 62, wherein said peptide compound comprises exendin-3 or exendin-4.

110. (Previously presented) The method of claim 109, wherein said peptide compound comprises exendin-4 acid.

USSN 10/629,649
Atty Docket No. 0212-CIP-9

111. (Previously presented) The method of claim 109, wherein said peptide compound comprises exendin-4 amide.

112. (Previously presented) The method of claim 62, wherein said peptide compound comprises an exendin analog.

113. (Canceled)